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SERIAL NUMBER	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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07/930,404 09/14/92 KAMIGUCHI

M 392.1290/JDH

EXAMINER

HEITBRINK

A3M1

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ART UNIT PAPER NUMBER

1307

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DATE MAILED: 05/04/93

This is a communication from the examiner in charge of your application.  
COMMISSIONER OF PATENTS AND TRADEMARKS

- ☒ This application has been examined ☐ Responsive to communication filed on \_\_\_\_\_ ☐ This action is made final.

A shortened statutory period for response to this action is set to expire 3 month(s), \_\_\_\_\_ days from the date of this letter.  
Failure to respond within the period for response will cause the application to become abandoned. 35 U.S.C. 133

**Part I THE FOLLOWING ATTACHMENT(S) ARE PART OF THIS ACTION:**

- |   |  |
|---|--|
| 1. <input checked="" type="checkbox"/> Notice of References Cited by Examiner, PTO-892. | 2. <input checked="" type="checkbox"/> Notice re Patent Drawing, PTO-948.        |
| 3. <input type="checkbox"/> Notice of Art Cited by Applicant, PTO-1449.                 | 4. <input type="checkbox"/> Notice of Informal Patent Application, Form PTO-152. |
| 5. <input type="checkbox"/> Information on How to Effect Drawing Changes, PTO-1474.     | 6. <input type="checkbox"/> _____  |

**Part II SUMMARY OF ACTION**

1. ☒ Claims 1-6 are pending in the application.  
Of the above, claims \_\_\_\_\_ are withdrawn from consideration.
2. ☐ Claims \_\_\_\_\_ have been cancelled.
3. ☐ Claims \_\_\_\_\_ are allowed.
4. ☒ Claims 1-6 are rejected.
5. ☐ Claims \_\_\_\_\_ are objected to.
6. ☐ Claims \_\_\_\_\_ are subject to restriction or election requirement.
7. ☒ This application has been filed with informal drawings under 37 C.F.R. 1.85 which are acceptable for examination purposes.
8. ☐ Formal drawings are required in response to this Office action.
9. ☐ The corrected or substitute drawings have been received on \_\_\_\_\_. Under 37 C.F.R. 1.84 these drawings are ☐ acceptable. ☐ not acceptable (see explanation or Notice re Patent Drawing, PTO-948).
10. ☐ The proposed additional or substitute sheet(s) of drawings, filed on \_\_\_\_\_ has (have) been ☐ approved by the examiner. ☐ disapproved by the examiner (see explanation).
11. ☐ The proposed drawing correction, filed on \_\_\_\_\_, has been ☐ approved. ☐ disapproved (see explanation).
12. ☐ Acknowledgment is made of the claim for priority under U.S.C. 119. The certified copy has ☐ been received ☐ not been received  
☐ been filed in parent application, serial no. \_\_\_\_\_; filed on \_\_\_\_\_
13. ☐ Since this application appears to be in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11; 453 O.G. 213.
14. ☐ Other

EXAMINER'S ACTION

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The prior art cited on PTO-<sup>1449</sup>~~119~~ on Sept. 14, 1992 has not been considered because copies of the prior art documents were not submitted.

Claims 4-6 are rejected under 35 U.S.C. § 101 because the claimed invention is directed to non-statutory subject matter.

The basis of this rejection is set forth in the two-step test given by In re Freeman 197 USPQ 464 (CCPA 1980), as modified by In re Walter 205 USPQ 397 (CCPA 1982) and In re Abele 214 USPQ 682 (CCPA 1982). See In re Meyer 215 USPQ 193, 198 (CCPA 1982).

The claims indirectly recite a mathematical algorithm by changing the waveform to a straight line and to a circular arc which clearly would involve mathematical calculations of an algorithm in the PMCCPU or display. Secondly, data gathering and displaying fail to render the claims statutory.

The claims may be amended to include a step or means of injection molding which would render the claims statutory.

The following is a quotation of the first paragraph of 35 U.S.C. § 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

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The specification is objected to under 35 U.S.C. § 112, first paragraph, as failing to adequately teach how to make and/or use the invention, i.e. failing to provide an enabling disclosure. The specification does not teach how to determine any of the points on the pressure wave form or the third point and how to determine whether a straight or arcuate waveform should be chosen.

Claims 4-6 are rejected under 35 U.S.C. § 112, first paragraph, for the reasons set forth in the objection to the specification.

Claim 4 and 5 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 4, line 11 "such a mold" does not clearly refer to "each mold" in line 3. Claim 4, line 16 "two points" are unclear as to the previously defined "two points"; --said-- should be inserted.

Claim 5, line 23 "point" should be --points--.

The following is a quotation of 35 U.S.C. § 103 which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section

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102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Subject matter developed by another person, which qualifies as prior art only under subsection (f) or (g) of section 102 of this title, shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person.

Claims 1-3 are rejected under 35 U.S.C. § 103 as being unpatentable over Japanese Kokai 61-197218 taken together with Japanese Kokai 61-154820.

The Japanese Kokai '218 discloses storing optimum pressure waveforms in memory and using the waveform as a target pressure. The Japanese Kokai '820 teaches using a set value set by a pressure setting device as a target for feedback control. It would have been obvious to use the target pressure waveform in Japanese Kokai '218 as a feedback control pressure in view of the teaching of Japanese Kokai '820 so as to operate the injection molding machine at the waveform pressures for optimum moldings. The operating of the injection molding machine during trial injection and adjusting molding condition to obtain the target waveform would have been obvious because Japanese Kokai '218

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adjusts pressure, speed and temperature so as to obtain the target wave form in the following molding operation.

The following is a quotation of 35 U.S.C. § 103 which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Subject matter developed by another person, which qualifies as prior art only under subsection (f) or (g) of section 102 of this title, shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person.

Claims 4-6 are rejected under 35 U.S.C. § 103 as being unpatentable over German Offenlegungsschrift 2,916,782.

The German patent discloses storing, displaying and correcting a pressure waveform using a light pencil. It would have been obvious to a person of ordinary skill in the art that the correction in the German patent would form a straight or arcuate line between two points on the waveform since this would correct a portion of the waveform.

The prior art made of record and not relied upon is

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considered pertinent to applicant's disclosure.

Kojima et al, Hara, and Japanese Kokai 1-267017 show measurements for determining a target pressure waveform and using the waveform for feedback control.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to J. Heitbrink whose telephone number is (703) 308-0673.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-0651.



JILL L. HEITBRINK  
PRIMARY EXAMINER  
ART UNIT 137

J. Heitbrink;nrd  
April 28, 1993